

Amendments to the Claims

1. (Currently Amended) A process for the production of sulphuric acid, wherein a sulphur dioxide-containing feed gas is reacted, at least in part, with oxygen in at least two contact stages (~~6₁...6_n~~) of main contacts (~~2,3~~), arranged in series, to generate sulphur trioxide, and wherein the generated sulphur trioxide-containing gas is fed to an absorber (~~4,5,16~~) and reacted therein to sulphuric acid, ~~characterized in that~~ wherein a partial stream (~~T~~) of the sulphur dioxide and sulphur trioxide-containing gas is withdrawn from a contact stage (~~6₁...6_{n-1}, 22₁...22_n~~) located upstream of the last main contact stage (~~6_x~~), and that the said partial stream (~~T~~) is mixed with the feed gas to form a contact gas having a sulphur dioxide content of more than 13 % by volume, and then returned to a first contact stage (~~6₁, 22₁~~).
2. (Currently Amended) A process according to claim 1, ~~characterized in that~~ wherein the contact gas has a sulphur dioxide content of between 14 and 25 % by volume.
3. (Currently Amended) A process according to ~~claims 1 or 2,~~ ~~characterized in that~~ claim 1, wherein the air and/or technical oxygen is supplied to the feed gas, preferably prior to being mixed with the partial stream (~~T~~), and that the O₂ to SO₂ ratio in the contact gas, based on the volumetric portions thereof, is adjusted to less than 1.2, preferably less than 0.8.
4. (Currently Amended) A process according to ~~any one of the preceding claims,~~ ~~characterized in that~~ claim 3, wherein the volumetric portion of the partial stream (~~T~~) supplied to the feed gas, amounts to between 15 and 35% of the contact gas.
5. (Currently Amended) A process according to ~~any one of the preceding claims,~~ ~~characterized in that~~ claim 1, wherein a pre-contact (~~15~~) is provided upstream of from the main contact (~~2,3~~) to which (~~pre-contact~~) the contact gas is fed, that a process gas

containing, at best, 13 % by volume of sulphur dioxide is withdrawn from the pre-contact (~~15~~), and that the said process gas is supplied to the first contact stage (~~6~~) of the main contact (~~2~~).

6. (Currently Amended) A process according to claim 5, **characterized in that wherein** the pre-contact (~~15~~) comprises one or two pre-contact stages (~~22~~, ~~22~~).

7. (Currently Amended) A process according to ~~claims 5 or 6~~, **characterized in that claim 5, wherein** the process gas discharged from the pre-contact (~~15~~), prior to being introduced into the main contact (~~2~~) is passed through a pre-absorber (~~16~~).

8. (Currently Amended) A process according to ~~any one of the preceding claims, characterized in that~~ **claim 5, wherein** the process gas discharged from the first main contact (~~2~~), prior to being introduced into the second main contact (~~3~~), is supplied to an intermediate absorber (~~4~~).

9. (Currently Amended) A process according to ~~any one of the preceding claims, characterized in that~~ **claim 5, wherein** the process gas discharged from the second main contact (~~3~~) is supplied to a final absorber (~~5~~).

10. (Currently Amended) A process according to ~~any one of claims 5 through 9, characterized in that~~ **claim 5, wherein** at least part of the process gas discharged from the pre-contact (~~15~~), via a bypass line (~~25~~), is conducted past the pre-absorber (~~15~~) directly into the main contact (~~2~~).

11. (Currently Amended) A process according to claim 9, **characterized in that wherein** the gas discharged from the final absorber (~~5~~) is subjected to gas scrubbing, in particular, with hydrogen peroxide, ammonia or sodium hydroxide forming the neutralizing agent for the sulphur dioxide.

12. (Currently Amended) A process according to ~~any one of the preceding claims, characterized in that~~ claim 9, wherein the partial stream (T), prior to being returned to the first contact stage (6₁, 22₁), is cooled to a temperature <500 °C.

13. (Currently Amended) A process according to ~~any one of the preceding claims, characterized in that~~ claim 9, wherein the amount of the gas re-circulated as partial stream (T) is adjusted on the basis of the temperature at which the gas leaves the first contact stage (6₁, 22₁).

14. (Currently Amended) A plant for the production of sulphuric acid, in particular, for carrying out the process according to ~~any one of claims 1 through 13, claim 1,~~ comprising at least two contact stages (6₁, ..., 6_n) of main contacts (2, 3) arranged in series, for converting a sulphur dioxide-containing feed gas with oxygen to generate sulphur trioxide, and comprising at least one absorber (4, 5, 16), ~~characterized in that~~ wherein at least one pre-contact stage (22₁, 22₂) is located upstream of the main contact stage (6₁), and that the exit of one contact stage (6₁, ..., 6_{n-1}, 22₁, ..., 22_n) located upstream of the last contact stage (6_n) of the main contact (3), e.g. via a re-circulation line (19), is connected with the inlet of the first pre-contact stage (22₁).

15. (Currently Amended) A plant according to claim 14, ~~characterized in that~~ wherein the re-circulation line (19) includes a hot gas blower (18).

16. A plant according to ~~claims 14 or 15, characterized in that~~ claim 14, wherein the re-circulation line (19) originates at the exit of the last contact stage (6₃) of the first main contact (2) and leads to the inlet of the pre-contact (15).

17. (Currently Amended) A plant according to ~~any one of claims 14 through 16, characterized in that~~ claim 14, wherein the re-circulation line (19) originates at the exit of the last contact stage (22₁, 22₂) of the pre-contact (15) and leads to the inlet of the pre-contact (15).

18. (Currently Amended) A plant according to ~~any one of claims 14 through 17, characterized in that~~ claim 14, wherein the pre-contact (15) comprises one or two pre-contact stages (~~22₁, 22₂~~), that the first main contact (2) comprises three main contact stages (~~6₁, 6₂, 6₃~~) and that the second main contact (3) comprises two main contact stages (~~6₄, 6₅~~).

19. (Currently Amended) A plant according to ~~any one of claims 14 through 18, characterized in that~~ claim 14, wherein between the pre-contact (15) and the first main contact (2) a pre-absorber (16) is provided; between the first main contact (2) and the second main contact (3) an intermediate absorber (4) is provided and downstream the second main contact (3) a final absorber (5) is provided.

20. (Currently Amended) A plant according to claim 19, ~~characterized in that~~ wherein between the pre-contact (15) and the first main contact (2) a bypass line leading around the pre-absorber (16) is provided.

21. (Currently Amended) A plant according to ~~any one of claims 14 through 20, characterized in that~~ claim 14, wherein between the inlet lines (~~20, 9~~) of the pre-contact (15) and of the first main contact (2) a bypass line (~~26~~) leading around the pre-contact (15) is provided.